

Summer 1999 -- Heat Hazards and Tips to Beat Workplace Heat

Virginia Occupational Safety and Health (VOSH) wants to make sure employers and workers have the information they need to cope with extreme heat now and throughout the warm season. Many workers across the Commonwealth spend some part of the day in a hot environment. With rising temperatures during the summer months, workers become more vulnerable to heat-related injuries and illnesses. Workers in foundries, laundries, bakeries, and on construction projects, to name a few industries, often face hot conditions which pose special hazards to safety and health. Those who don't take precautions could suffer rashes, cramps, fainting, heat exhaustion or heat stroke.

Most heat-related health problems can be prevented or the risk of developing them reduced. Simply drinking plenty of water and wearing light, loose-fitting clothes, for example, significantly reduce the risk. VOSH suggests the following tips for employers and workers to prevent heat-related disorders:

- Encourage workers to drink plenty of water (without salt) - about one cup of cool water every 15-20 minutes, even if they are not thirsty. Avoid alcohol, coffee, tea, and caffeinated soft drinks, which contribute to dehydration.
- Help workers adjust to the heat by assigning a lighter workload and longer rest periods for the first five to seven days of intense heat. This process needs to start all over again when a worker returns from vacation or absence due to illness or injury.
- Encourage workers to wear lightweight, loose-fitting, light-colored clothing. Workers should change their clothing if it gets completely saturated.
- Use general ventilation and spot cooling at points of high heat production. Good air flow increases evaporation and cooling of the skin. Stagnant atmospheric conditions and poor air quality can induce heat-related illnesses.
- Learn to spot the signs of heat stroke, which can be fatal. The symptoms are severe headache, mental confusion/loss of consciousness, flushed face, and hot, dry skin. If someone has stopped sweating, seek medical attention immediately. Other heat-induced illnesses include heat exhaustion, heat cramps, skin rashes, swelling and loss of mental and physical work capacity.
- Train first-aid workers to recognize and treat the signs of heat stress. Be sure that all workers know who is trained to render first aid. Supervisors also should be able to detect early signs of heat-related illness and permit workers to interrupt their work if they become extremely uncomfortable.
- Consider a worker's physical condition when determining fitness to work in hot environments. Obesity, lack of conditioning, pregnancy, and inadequate rest can increase susceptibility to heat stress.
- Alternate work and rest periods, with longer rest periods in a cooler area. Shorter, but frequent, work-rest cycles are best. Schedule heavy work for cooler parts of the day and use appropriate protective clothing.

- Certain medical conditions, such as heart conditions, or temperatures like low-sodium diets and some medications, increase the risk from heat exposure. Seek medical advice in those cases.
- Monitor temperatures, humidity, and workers' responses to heat at least hourly.

More detailed information regarding the recognition, evaluation, control of, and compliance actions involving heat stress is available through Federal OSHA's technical links web site at <http://www.osha-slc.gov/SLTC/heatstress/index.html>

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